

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 03/13/2018 Version: 1.0

### **SECTION 1: Identification**

Identification

Product form : Mixture Product name : Bis-Core Base

Recommended use and restrictions on use

Use of the substance/mixture : For RX only

1.3. Supplier

Manufacturer

Bisco, Inc. 1100 W. Irving Park Rd. Schaumburg, IL 60193

T 1.847.534.6000 - F 1.847.891.5049 sales@bisco.com - www.bisco.com

**Emergency telephone number** 

: CHEMTREC - 24-Hour Hazmat Emergency Communications Center **Emergency number** 

Domestic: 1-800-424-9300 Outside the U.S.: 1-703-527-3887, collect calls accepted

## SECTION 2: Hazard(s) identification

#### Classification of the substance or mixture

#### **GHS-US** classification

H315 Skin corrosion/irritation Causes skin irritation

Category 2

Serious eye damage/eye H319 Causes serious eye irritation

irritation Category 2A

Skin sensitization, Category H317 May cause an allergic skin reaction

Full text of H statements: see section 16

#### GHS Label elements, including precautionary statements 2.2.

### **GHS-US** labeling

Hazard pictograms (GHS-US)



Hazard statements (GHS-US) : H315 - Causes skin irritation

H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation

Precautionary statements (GHS-US) P261 - Avoid breathing vapors

P264 - Wash hands thoroughly after handling

P272 - Contaminated work clothing must not be allowed out of the workplace

P280 - Wear protective gloves, eye protection, face protection

P302+P352 - If on skin: Wash with plenty of Wash skin with soap and water

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing

P321 - Specific treatment (see First aid measures on this label) P332+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse

P363 - Wash contaminated clothing before reuse

P501 - Dispose in a safe manner in accordance with local/national regulations

### Other hazards which do not result in classification

No additional information available

## **Unknown acute toxicity (GHS US)**

Not applicable

02/22/2018 EN (English US) Page 1

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### **SECTION 3: Composition/Information on ingredients**

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Fused Silica	(CAS-No.) 60675-86-0	10 - 30	Skin Irrit. 2, H315
BisGMA	(CAS-No.) 1565-94-2	5 - 10	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Skin Sens. 1, H317
Urethane Dimethacrylate	(CAS-No.) Proprietary	5 - 10	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H336
Tetrahydrofurfuryl Methacrylate	(CAS-No.) 2455-24-5	1 - 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Acute 3, H402
Proprietary	(CAS-No.) Proprietary	1 - 5	Skin Sens. 1B, H317

Full text of hazard classes and H-statements : see section 16

#### **SECTION 4: First-aid measures**

#### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs:

Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Eye irritation.

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

## **SECTION 5: Fire-fighting measures**

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

#### 5.2. Specific hazards arising from the chemical

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

### 5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### **SECTION 6: Accidental release measures**

## 6.1. Personal precautions, protective equipment and emergency procedures

### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing mist, vapors.

## 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product.

Other information : Dispose of materials or solid residues at an authorized site.

02/22/2018 EN (English US) 2/7

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 6.4. Reference to other sections

For further information refer to section 13.

## **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal

protective equipment. Avoid breathing mist, vapors.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed

out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands

after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

#### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

### **Urethane Dimethacrylate (Proprietary)**

Not applicable

### BisGMA (1565-94-2)

Not applicable

### Tetrahydrofurfuryl Methacrylate (2455-24-5)

Not applicable

### **Proprietary (Proprietary)**

Not applicable

Fused Silica (60675-86-0)

Not applicable

#### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

### Hand protection:

Protective gloves

### Eye protection:

Protective goggles

#### Skin and body protection:

Wear suitable protective clothing

## Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

### **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Paste.
Color : Straw
Odor : Acrylic

Odor threshold : No data available pH : No data available Melting point : No data available Freezing point : Not applicable

02/22/2018 EN (English US) 3/7

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Boiling point : No data available Flash point : No data available Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : Non flammable. Vapor pressure : No data available Relative vapor density at 20 °C : No data available Relative density : Not applicable Solubility : No data available Log Pow : No data available Auto-ignition temperature : Not applicable Decomposition temperature : No data available Viscosity, kinematic : Not applicable Viscosity, dynamic : No data available **Explosion limits** : Not applicable : No data available Explosive properties Oxidizing properties : No data available

#### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

#### 10.5. Incompatible materials

No additional information available

## 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

Urethane Dimethacrylate (Proprietary)	
LD50 oral rat	N/A
LD50 dermal rat	N/A
LD50 dermal rabbit	N/A
LC50 inhalation rat (ppm)	N/A

Proprietary (Proprietary)	
LD50 oral rat	> 2000 mg/kg body weight (Rat; Literature study)
LD50 dermal rat	> 2000 mg/kg body weight (Rat; Literature study)

Fused Silica (60675-86-0)	
LD50 oral rat	N/A
LD50 dermal rat	N/A
LD50 dermal rabbit	N/A
LC50 inhalation rat (ppm)	N/A

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.

02/22/2018 EN (English US) 4/7

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

## **Urethane Dimethacrylate (Proprietary)**

IARC group 4 - Probably not carcinogenic to humans

Fused Silica	(60675-86-0)	
IARC group		4 - Probably not carcinogenic to humans

Reproductive toxicity : Not classified Specific target organ toxicity – single exposure : Not classified

Urethane Dimethacrylate (Proprietary)	
LOAEL (oral,rat)	N/A mg/kg body weight
LOAEL (dermal,rat/rabbit)	N/A mg/kg body weight
LOAEC (inhalation,rat,gas)	N/A ppmV/4h
LOAEC (inhalation,rat,vapour)	N/A mg/l/4h
LOAEC (inhalation,rat,dust/mist/fume)	N/A mg/l/4h

Fused Silica (60675-86-0)	
LOAEL (oral,rat)	N/A mg/kg body weight
LOAEL (dermal,rat/rabbit)	N/A mg/kg body weight
LOAEC (inhalation,rat,gas)	N/A ppmV/4h
LOAEC (inhalation,rat,vapour)	N/A mg/l/4h
LOAEC (inhalation,rat,dust/mist/fume)	N/A mg/l/4h

Specific target organ toxicity – repeated : Not classified

exposure

Urethane Dimethacrylate (Proprietary)	
LOAEL (oral,rat,90 days)	N/A mg/kg bodyweight/day
LOAEL (dermal,rat/rabbit,90 days)	N/A mg/kg bodyweight/day
LOAEC (inhalation,rat,gas,90 days)	N/A ppmV/6h/day
LOAEC (inhalation,rat,vapour,90 days)	N/A mg/l/6h/day
LOAEC (inhalation.rat.dust/mist/fume.90 days)	N/A mg/l/6h/day

Fused Silica (60675-86-0)	
LOAEL (oral,rat,90 days)	N/A mg/kg bodyweight/day
LOAEL (dermal,rat/rabbit,90 days)	N/A mg/kg bodyweight/day
LOAEC (inhalation,rat,gas,90 days)	N/A ppmV/6h/day
LOAEC (inhalation,rat,vapour,90 days)	N/A mg/l/6h/day
LOAEC (inhalation,rat,dust/mist/fume,90 days)	N/A mg/l/6h/day

Aspiration hazard : Not classified

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Eye irritation.

## **SECTION 12: Ecological information**

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse

effects in the environment.

Tetrahydrofurfuryl Methacrylate (2455-24-5)	
LC50 fish 1	34.7 mg/l (LC50; 96 h; Pimephales promelas)
Proprietary (Proprietary)	
LC50 fish 1	175 mg/l (LC50; 96 h)
EC50 Daphnia 1	> 100 mg/l (EC50; EU Method C.2; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)

02/22/2018 EN (English US) 5/7

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Proprietary (Proprietary)		
LC50 fish 2	> 100 mg/l (LC50; EU Method C.1; 96 h; Brachydanio rerio; Semi-static system; Fresh water; Experimental value)	
EC50 Daphnia 2	>= 100 mg/l (NOEC; EU Method C.2; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)	
Threshold limit algae 1	> 100 mg/l (EC50; EU Method C.3; 72 h; Scenedesmus subspicatus; Static system; Fresh water; Experimental value)	
Threshold limit algae 2	> 100 mg/l (EC50; EU Method C.3; 72 h; Scenedesmus subspicatus; Static system; Fresh water; Experimental value)	

## 12.2. Persistence and degradability

Tetrahydrofurfuryl Methacrylate (2455-24-5)	
Persistence and degradability	Biodegradability in water: no data available. No (test)data on mobility of the substance available.
Proprietary (Proprietary)	
Persistence and degradability	Readily biodegradable in water.

## 12.3. Bioaccumulative potential

Tetrahydrofurfuryl Methacrylate (2455-24-5)	
Log Pow	1.3
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Proprietary (Proprietary)	
Log Pow	0.75 (Calculated)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

## 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Effect on the global warming : No known effects from this product.

GWPmix comment : No known effects from this product.

## **SECTION 13: Disposal considerations**

## 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## **SECTION 14: Transport information**

## **Department of Transportation (DOT)**

In accordance with DOT

Other information : No supplementary information available.

**TDG** 

Transport by sea

Air transport

## **SECTION 15: Regulatory information**

### 15.1. US Federal regulations

02/22/2018 EN (English US) 6/7

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### Tetrahydrofurfuryl Methacrylate (2455-24-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

## 15.2. International regulations

#### CANADA

No additional information available

#### **EU-Regulations**

No additional information available

## **National regulations**

No additional information available

### 15.3. US State regulations

No additional information available

## **SECTION 16: Other information**

Revision date : 02/23/2018

#### Full text of H-phrases:

Text of 11 philaded.	
H227	Combustible liquid
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H320	Causes eye irritation
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H402	Harmful to aquatic life

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

02/22/2018 EN (English US) 7/7